## COPPER VALLEY WIRELESS, INC. 329 Fairbanks Drive, Suite 12 P.O. Box 3329 Valdez, Alaska 99686

Magalie Roman Salas, Secretary Office of the Secretary 445 - 12th Street, S.W. Washington, D.C. 20554

Attention: Patrick Forster, Senior Engineer

Room 3-A104 Policy Division

Wireless Telecommunications Bureau

Re: Implementation Plan of Wireless E-911 Phase II

Automatic Location Identification

Notice Pertaining to CC Docket No. 94-102

## SUPPLEMENTAL E-911 PHASE II STATUS REPORT

Dear Ms. Salas:

In response to the Commission's December 15, 2000 letter request for additional information and in accordance with the <u>Third Report and Order</u> in CC Docket No. 94-102 and the Commission's related <u>Public Notice</u>, Mimeo DA 00-2099, released September 14, 2000, we hereby submit our supplemental report on the status of implementation plans for Wireless E-911 Phase II Automatic Location Information ("ALI"), as follows:

## Background/Contact Information

1) Carrier Identifying Information:

Copper Valley Wireless, Inc. TRS Number: 812393

2) Contact Information: Amanda Hale, General Manager

Copper Valley Wireless, Inc. 329 Fairbanks Drive, Suite 12

P.O. Box 3329

Valdez, Alaska 99686 Tel: 907-835-8005 FAX: 907-835-8002 and

Robert M. Jackson Blooston, Mordkofsky, Jackson & Dickens 2120 L Street, N.W., Suite 300 Washington, D.C. 20037

Tel: 202-828-5515 FAX: 202-828-5568 E-Mail: rmj@bmjd.com

## E-911 Phase II Location Technology Information

1) Type of Technology: We will deploy a handset-based ALI technology, subject to and contingent upon the ultimate availability of cost-effective ALI equipment that is compatible with our existing cellular system equipment, which has been discontinued by the manufacturer.

Our small size and the geographic breadth and terrain characteristics of our service area present unique challenges in meeting the Commission-mandated ALI requirements. In several of our wireless footprint areas, there is only one cellular base station location able to connect with the subscriber equipment, which, based upon the information presently available to us, appears to eliminate the use of the Time Difference of Arrival ("TDOA") or Angle of Arrival ("AOA") technologies as technically feasible solutions. In addition, our review the RF multipath fingerprinting method indicates that seasonal fluctuations in vegetation and snow cover render the technology impractical, a technology that is unduly expensive for us to deploy in any event.

We have reviewed the Fonefinder GPS-equipped subscriber equipment, manufactured by Tendler Cellular, Inc. of Boston, Massachusetts; and we have contacted Snaptrack in San Jose, California.

Because only one cellular base station location is available to provide service in several of our service areas, we will be virtually forced to employ an exclusively handset-based solution in the: a) Heney Ridge/Copper River Flats area (Cordova); b) Naked Island/Prince William Sound area (Valdez); c) Valdez area; and d) Sourdough Ridge/Dan Creek/ May Creek area (McCarthy). A network-based solution may be theoretically possible in our other service areas, but it is unlikely that it can be deployed in a useful manner.

Our cellular system utilizes analog equipment manufactured by Plexsys. This equipment has been discontinued by the manufacturer and is no longer being supported by the manufacturer. IWS (the

parent company of Plexsys) has advised us that it has no plans to develop network-based ALI solutions for our system's Plexsys D Series analog cellular system equipment. When pressed, IWS estimated that to commission a special software development project would require between six and twelve months to complete and cost a very large sum of money (exclusive of the additional costs associated with equipment, installation and testing). In view of these considerations and others, IWS recommended handset-based solutions as our only practical means of achieving compliance with the Commission's Phase II E-911 requirements.

We labor under an additional constraint as well. The existing Plexsys cellular system equipment is only approximately 50% into its useful life. With the very small customer base that we have (which is attributable to the sparse population of our service areas) it is not economically possible to upgrade or replace the equipment at our twelve cellular base station locations and at our four Mobile Telephone Switching Offices ("MTSOs") due to the ruinous debt load that we would be forced to incur. It is doubtful that we could survive financially if forced to replace or upgrade all of this equipment.

In addition, it should be emphasized that ALI equipment generally is still in the research and development stage, and, as a result, none of the equipment is ready for commercial deployment.

2) Testing and Verification: Since there is very little information available from the vendors, it is difficult to devise a testing methodology. However, we will utilize the Commission's suggested testing guidelines in OET Bulletin No. 71, issued April 12, 2000 or their functional equivalent. We would anticipate regular testing of random locations throughout our service area, beginning in areas where the PSAP has requested Phase II deployment.

Assuming the availability of cost-effective ALI equipment that is compatible with our existing cellular system equipment, we anticipate entering into a contract with an equipment vendor for a "turn-key" package. Testing and verification of the equipment would occur before formal acceptance of the equipment, as installed.

3) <u>Implementation Details and Schedule</u>: Assuming the availability of cost-effective ALI equipment that is compatible with our existing cellular system equipment, we plan to adhere to the implementation schedule established by the Commission in the <u>Fourth Memorandum Opinion and Order</u>, released September 8, 2000. However, our ability to do so will depend, in large measure, on the ability of equipment manufacturers to have their products operational and delivered in a timely manner. At this time, no equipment vendor generally has been able to commit to a delivery schedule. It is anticipated that the equipment installation will

be performed by the equipment vendor under a "turn-key" contract.

- 4) <u>PSAP Interface</u>: No information is presently available as to how an ALI system will interface with the PSAP. However, based upon currently available information from other sources, we anticipate using the services of GTE/TSI or a similar entity, assuming the availability of cost-effective equipment that is compatible with our existing cellular system equipment. A data link would most likely be established from our signal control point to the ALI database serving the local PSAPs, and between the signal control point and a local server collecting the results of the location query. The voice portion would most likely be forwarded to the selective router. The location will most likely be sent to the ALI database along with the number of the party initiating the E-911 call, and will most likely be transmitted to the PSAP using an appropriate data link.
- 5) Existing Handsets: We will continue to keep abreast of our current handset suppliers' ALI deployment plans. Our subscribers will be informed beginning sometime in 2001, by way of bill inserts, of the coming availability of ALI-capable handsets and given the opportunity to acquire them, when available. Subscribers will also be informed of the December 31, 2005 date by which basically all or substantially all handsets must be ALI-capable.
- 6) <u>Location of Non-Compatible Handsets</u>: We will provide, at a minimum, Phase I ALI information for handsets that are incompatible with the Phase II technology.

Beginning with the October 1, 2001 date for starting to sell and activate ALI-capable handsets, we will tout their advantages to new subscribers and recommend that non-compatible handsets be restricted for use at campus locations. We will use a "best practices" solution in connection with providing ALI to non-compatible handsets, assuming, of course, that the PSAP is equipped to utilize Phase II data. It appears that such solutions are currently in development and, at this stage, we are not committed to any particular solution.

7) Other Information: We have received no E-911 implementation requests from PSAPs. In fact, in contacting three public safety departments in our service areas, we have been advised that none of them have plans to upgrade their own equipment for ALI capability, and that none of them plan to request ALI capability from us at any time in the near future.

Respectfully submitted,

Copper Valley Wireless, Inc.

Dated: 12/21/00

Amanda Hale, General Manager